



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/657,568

09/08/2003

Abolade Gbadegesin

MS1-1517US

1864

22801

7590

05/28/2008

LEE & HAYES PLLC

421 W RIVERSIDE AVENUE SUITE 500

SPOKANE, WA 99201

EXAMINER

BATES, KEVIN T

ART UNIT

PAPER NUMBER

2153

MAIL DATE

DELIVERY MODE

05/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/657,568	Applicant(s) GBADEGESIN ET AL.	
	Examiner KEVIN BATES	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to a communication made on March 19, 2008.

Claims 21-86 have been cancelled.

Claims 1-20 are pending in this application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed towards a processor-accessible media. The processor-accessible media is defined in ¶447 of the specification as including transmission media, thus the claims are directed towards non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 11-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Brendel (5774660).

Regarding claim 1, Brendel teaches one or more processor-accessible media comprising processor-executable instructions that, when executed, direct a device to perform actions comprising: accepting a connection (Col. 12, lines 10-17); aggregating a connection state for the connection from a protocol stack (Col. 12, lines 25-29); and sending the connection state (Col. 12, lines 38-54).

Regarding claim 11, Brendel teaches one or more processor-accessible media comprising processor-executable instructions that, when executed, direct a device to perform actions comprising: receiving a connection state for a connection (Col. 12, lines 38-54); injecting the connection state for the connection into a network stack (Col. 12, lines 52-54); and continuing the connection using the injected connection state (Col. 11, lines 20-23).

Regarding claim 2, Brendel teaches the one or more processor-accessible media as recited in claim 1, wherein the action of accepting comprises an action of: sending an acknowledgment packet in response to a connection-requesting packet (Col. 12, lines 15-19).

Regarding claim 3, Brendel teaches the one or more processor-accessible media as recited in claim 1, comprising the processor-executable instructions that, when executed, direct the device to perform a further action comprising: receiving data for the connection (Col. 12, lines 10-17); wherein the action of aggregating comprises an action of: aggregating the connection state from a protocol state of the protocol stack and the data (Col. 12, lines 38-54).

Regarding claim 4, Brendel teaches the one or more processor-accessible media as recited in claim 1, wherein the action of aggregating comprises an action of: compiling a protocol state from the protocol stack (Col. 11, line 64 – Col. 12, line 2, where the TCP state is a combination of information from the TCP/IP layers, for example the TCP state includes information such as acknowledgement number, sequence number (Col 12, lines 19-23; TCP layer), checksums for error detection (Col. 14, lines 1-5, and clients IP address (Col. 14, lines 14-21, IP layer)).

Regarding claim 5, Brendel teaches the one or more processor-accessible media as recited in claim 4, wherein the action of compiling comprises an action of: compiling the protocol state from the protocol stack starting at a highest level of the protocol stack (Col. 11, line 64 – Col. 12, line 2, where the TCP state is a combination of information from the TCP/IP layers, for example the TCP state includes information such as acknowledgement number, sequence number (Col 12, lines 19-23; TCP layer), checksums for error detection (Col. 14, lines 1-5, and clients IP address (Col. 14, lines 14-21, IP layer)).

Regarding claim 6, Brendel teaches the one or more processor-accessible media as recited in claim 4, wherein the action of compiling comprises an action of: compiling the protocol state from the protocol stack at a transmission control protocol (TCP) stack portion and an internet protocol (IP) stack portion (Col. 11, line 64 – Col. 12, line 2, where the TCP state is a combination of information from the TCP/IP layers, for example the TCP state includes information such as acknowledgement number,

sequence number (Col 12, lines 19-23; TCP layer), checksums for error detection (Col. 14, lines 1-5, and clients IP address (Col. 14, lines 14-21, IP layer)).

Regarding claim 12, Brendel teaches the one or more processor-accessible media as recited in claim 11, wherein the action of continuing comprises an action of: continuing the connection by indicating received packets up to an application in accordance with the injected connection state (Col. 11, lines 20-23).

Regarding claim 13, Brendel teaches the one or more processor-accessible media as recited in claim 11, wherein: the action of receiving comprises an action of: receiving the connection state, the connection state having a protocol state and data for the connection (Col. 12, lines 38-54); and the action of injecting comprises an action of: injecting the protocol state into a protocol stack portion of the network stack (Col. 12, lines 38-54).

Regarding claim 14, Brendel teaches the one or more processor-accessible media as recited in claim 13, wherein the action of injecting the connection state further comprises an action of: indicating the data for the connection up the network stack toward an application (Col. 13, line 66 – Col. 14, line 33).

Regarding claim 15, Brendel teaches the one or more processor-accessible media as recited in claim 11, wherein the action of injecting comprises an action of: infusing a protocol state from the connection state into a protocol stack portion of the network stack (Col. 12, lines 38-54).

Regarding claim 16, Brendel teaches the one or more processor-accessible media as recited in claim 15, wherein the action of infusing comprises an action of:

Art Unit: 2153

infusing the protocol state into the protocol stack starting at a highest level of the protocol stack (Col. 11, line 64 – Col. 12, line 2, where the TCP state is a combination of information from the TCP/IP layers, for example the TCP state includes information such as acknowledgement number, sequence number (Col 12, lines 19-23; TCP layer), checksums for error detection (Col. 14, lines 1-5, and clients IP address (Col. 14, lines 14-21, IP layer)).

Regarding claim 17, Brendel teaches the one or more processor-accessible media as recited in claim 15, wherein the action of infusing comprises an action of: infusing the protocol state into the protocol stack at a transmission control protocol (TCP) stack portion and an internet protocol (IP) stack portion (Col. 11, line 64 – Col. 12, line 2, where the TCP state is a combination of information from the TCP/IP layers, for example the TCP state includes information such as acknowledgement number, sequence number (Col 12, lines 19-23; TCP layer), checksums for error detection (Col. 14, lines 1-5, and clients IP address (Col. 14, lines 14-21, IP layer)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-10 and 18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Bendel in view of Westberg (6041054).

Regarding claim 7, Bendel teaches the one or more processor-accessible media as recited in claim 1, wherein the action of sending comprises actions of: bundling the connection state with data that corresponds to the connection to produce a binary blob; and transmitting the binary blob from an originating device to a target device (Col. 12, lines 30 – 54, where a binary blob is defined in the specification as a communication of the connection state and communication data and Bendel teaches transmitting that data).

Bendel does not explicitly indicate a flow identifier.

Westberg teaches that sessions in the TCP/IP network can be given flow or session identifiers (Col. 6, lines 6-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 8, Bendel teaches the one or more processor-accessible media as recited in claim 1, wherein the action of sending comprises actions of: bundling the connection state with a data that corresponds to the connection to produce a binary blob (Col. 12, lines 30 – 54, where a binary blob is defined in the specification as a communication of the connection state and communication data and Bendel teaches transmitting that data); and transmitting the binary blob from an originating device to a target device in a reliable manner such that the binary blob may be received intact at the target device even if one or more packets that comprise the binary blob are

lost or corrupted (Col. 13, line 66 – Col. 14, line 33, where the messages are sent using TCP which provides reliable communication using acknowledgements and checksums).

Bendel does not explicitly indicate a flow identifier.

Westberg teaches that sessions in the TCP/IP network can be given flow or session identifiers (Col. 6, lines 6-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 9, Bendel teaches the one or more processor-accessible media as recited in claim 1.

Bendel does not explicitly indicate the processor-executable instructions that, when executed, direct the device to perform further actions comprising: selecting a flow identifier for the connection responsive to a connection counter; and sending the flow identifier to identify packets corresponding to the connection.

Westberg teaches that sessions in the TCP/IP network can be given flow or session identifiers (Col. 6, lines 6-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 10, Bendel teaches the one or more processor-accessible media as recited in claim 1, wherein the action of sending comprises an action of: sending the connection state to a targeted device (Col. 12, lines 38-54).

Bendel does not explicitly indicate wherein the processor-executable instructions, when executed, direct the device to perform a further action comprising: forwarding subsequent packets for the connection to the targeted device using a flow identifier to encapsulate the subsequent packets.

Westberg teaches that sessions in the TCP/IP network can be given flow or session identifiers that encapsulate the IP packets (Col. 6, lines 22-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 18, Bendel teaches the one or more processor-accessible media as recited in claim 11, wherein the action of receiving comprises actions of: receiving a binary blob from an originating device at a target device (Col. 12, lines 30 – 54, where a binary blob is defined in the specification as a communication of the connection state and communication data and Bendel teaches transmitting that data), the binary blob including the connection state and a data that corresponds to the connection; and unbundling the connection state and the data at a level of the network stack that is below a protocol stack portion of the network stack (Col. 13, line 18-46).

Bendel does not explicitly indicate a flow identifier.

Westberg teaches that sessions in the TCP/IP network can be given flow or session identifiers (Col. 6, lines 6-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 19, Bendel teaches the one or more processor-accessible media as recited in claim 11.

Bendel does not explicitly indicate comprising the processor-executable instructions that, when executed, direct the device to perform further actions comprising: receiving an encapsulation mapping; and storing the received encapsulation mapping in an encapsulation mapping table that may be accessed according to flow identifier.

Westberg teaches receiving an encapsulation mapping; and storing the received encapsulation mapping in an encapsulation mapping table that may be accessed according to flow identifier (Col. 6, lines 44-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Regarding claim 20, Bendel teaches the one or more processor-accessible media as recited in claim 11, including receiving the connection state from an originating device (Col. 12, lines 38-54).

Bendel does not explicitly indicate the action of receiving comprises an action of: wherein the processor-executable instructions, when executed, direct the device to perform a further action comprising: receiving from the originating device encapsulated packets that have a flow identifier; and de-encapsulating the encapsulated packets

using an encapsulation mapping entry that links the flow identifier to a source/destination pair.

Westberg teaches : receiving from the originating device encapsulated packets that have a flow identifier; and de-encapsulating the encapsulated packets using an encapsulation mapping entry that links the flow identifier to a source/destination pair (Col. 6, lines 44-62).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign a session identifier to the flows in the session table in Bendel to more quickly identify accepted communication sessions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN BATES whose telephone number is (571)272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2153

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin Bates/
Primary Examiner, Art Unit 2153